Abstract of the Disclosure

A method, computer program, and database system are disclosed for executing database queries. The database includes a first table (T1) having a primary key (PK) column and a first correlated value column (CV1) and a second table (T2) having a foreign key (FK) column

5   related to the primary key column of the first table and a second correlated value column (CV2). One implementation of the method includes preparing a database query for execution based at least in part on application of a derived constraint rule (DCR) having the form, $(PK = FK) \rightarrow CV_2 + C_1 \leq CV_1 \leq CV_2 + C_2$, where C_1 and C_2 are constants and "$\rightarrow$" means "implies," to produce an execution plan. Abort steps that are conditioned on changes in the DCR are also

10   included in the execution plan. The plan is then executed.